Family and Consumer Sciences
Course: Nutrition Science
Course Code # 5616
_____ 1 Credit

School Year _____

Term:____Fall____Spring

Student:	Grade:
Teacher:	School:
Number of Competencies in Course:	**41**
Number of Competencies Mastered:	
Percent of Competencies Mastered:	

Standard 1.0 Students will analyze the interrelationship of food, nutrition, and science.

Learning Expectations	Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
1.1	Define the study of the science of food and nutrition and distinguish from a traditional food preparation course.		
1.2	Explain the interrelationship of food, nutrition, and science.		
1.3	Describe the main goal of food scientists.		
1.4	Evaluate food intake related to human needs.		
1.5	Analyze factors that influence food choices and habits.		

Standard 2.0 Students will relate nutritional practices to the health of the individual in a global society across the life span.

Learning Expectations	Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
2.1	Analyze various guidelines for good nutrition that promote the health of the individual across the life span.		
2.2	Analyze the impact and alleviation of food and nutrition problems in the world.		
2.3	Determine nutritional needs that promote optimum health across the life span addressing the diversity of people, culture, and religions.		
2.4	Examine food and nutrition misinformation.		

Standard 3.0 Students will use knowledge of metabolism and digestion to establish lifelong habits of good nutrition.

Learning Expectations	Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
3.1	Analyze the relationships between calories, food, and energy.		
3.2	Examine the digestive system and the role of enzymes in digestion and food preparation.		

Standard 4.0 Students will examine methodology for use of the scientific laboratory to conduct and report results of food science experiments.

Learning Expectations	Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
4.1	Apply proper safety techniques for the laboratory.		
4.2	Identify the location and demonstrate the correct use of emergency equipment in the laboratory.		
4.3	Identify basic laboratory equipment, rules for usage, and performance techniques.		
4.4	Demonstrate use of the scientific method when participating in food science laboratory experiences.		

Standard 5.0 Students will analyze methods used in food product development and marketing.

Learning Expectations	Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
5.1	Examine the sensory factors that make up the sensory characteristics for tasting food.		
5.2	Demonstrate controlled sensory testing and rating techniques.		
5.3	Evaluate food label information.		

Standard 6.0 Students will evaluate a variety of changes, including chemical and physical, that affect food product quality.

Learning Expectations	Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
6.1	Relate differences in chemical and physical changes to the states of matter.		
6.2	Identify chemical symbols and use these symbols in writing chemical formulas and equations.		
6.3	Demonstrate and conclude how mixtures are represented in various food products.		
6.4	Demonstrates how the major leavening agents are used in foods and describe the actions observed.		
6.5	Demonstrate the difference between the process of fermentation and pasteurization and explain the usage in food technology.		

Standard 7.0 Students will apply science process skills when analyzing the structure and composition of food.

Learning Expectations	Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
7.1	Examine the properties and functions of water.		
7.2	Analyze the structure and composition of carbohydrates and fiber.		
7.3	Analyze the properties and composition of lipids in relation to their functions in food preparation and in the body.		
7.4	Describe the chemical nature and molecular structure of protein and the functions of protein in food.		
7.5	Examine the types, functions, sources, and deficiencies of vitamins and minerals.		

Standard 8.0 Students will analyze methods used and factors involved in the scientific processing of food.

Learning Expectations	Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
8.1	Examine the use of additives in food processing.		
8.2	Evaluate the use of thermal preservation methods in the processing of food.		
8.3	Explain the process and methods of processing foods by dehydration.		
8.4	Compare the processes of fermentation and curing.		
8.5	Evaluate current trends in commercial food preservation.		
8.6	Evaluate the causes and prevention of food contamination and spoilage.		
8.7	Analyze major components and stages of food product development.		

Standard 9.0 Students will analyze career paths within the food science, dietetics, and nutrition industries.

Learning Expectations	Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
9.1	Evaluate jobs and preparation requirements for careers within the food science, dietetics, and nutrition industries.		
9.2	Assess personal qualifications, interests, values, and educational preparation necessary for employment in a career in nutrition and the food science industries.		

Standard 10.0 Students will demonstrate leadership, citizenship, and teamwork skills required for success in the family, workplace, and community.

Learning Expectations	Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
10.1	Examine the components of FCCLA and the relationship to the food science and nutrition course of study.		
10.2	Assess factors involved in successful leadership skills, citizenship traits, and teamwork traits.		
10.3	Plan activities using the FCCLA Planning Process.		
10.4	Apply leadership, citizenship, and teamwork skills as an integral part of class activities.		

Additional comments: _____